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**Title :** Gross Morphology of the Ovaries of the Florida Manatee (*Trichechus manatus latirostris*)

**Category :** Anatomy / Morphology

**Student :** B.A./B.S.

**Preferred Format :** Oral Presentation

**Abstract :** Comprehensive description of the gross morphology of the ovaries of the Florida manatee is limited. It is hoped that a greater understanding of manatee ovaries will provide insights into fecundity and reproductive history. We described gross ovarian morphology by comparing 84 sets of manatee ovaries to a general mammalian ovary model. Manatee ovaries are large, relatively flat, and often folded as a result of confinement within their closed bursae and recessed position in the hypogastric fossae. Most structural development occurs in the thick cortices on the ventral aspect of the ovaries, but sometimes it extends onto the dorsal surface and inner bursa wall. Ovaries within a single reproductive class, as well as those of an individual female, can vary considerably in size, shape, color, and level of structural development. In addition, ovarian size and shape are greatly influenced by medullary fat and longitudinal cortical folding. Although the manatee produces just one offspring per pregnancy (monotocous), the ovaries of the manatee develop many, small vesicular follicles that ovulate during each reproductive cycle (polyovular). Developing follicles occur in mature, immature, and even fetal ovaries of the manatee. Variable numbers of vesicular follicles (VFs) occur on one or both ovaries during the follicular phase of the reproductive cycle. Even if VFs occur on both ovaries, ruptured follicles may be present on only one ovary. The presence of VFs and corpora lutea of pregnancy (CLPs) on the same ovary suggests non-simultaneous release of ova, excess VF production, or both. Both ovaries can develop CLPs during a pregnancy and a larger number sometimes form on the non-pregnant ovary. CLPs with and without stigmata are observed, reflecting asynchronous formation or the presence of accessory corpora lutea. CLPs may begin regression to corpora albicantia (CA) prior to parturition. CA at various stages of regression occur within the cortex.